UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/553,377	07/10/2006	Attila Haraszti	200401544-3	3675

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EXAMINER
ANDLER, MICHAEL S

ART UNIT	PAPER NUMBER
2876	

NOTIFICATION DATE	DELIVERY MODE
03/19/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>09 April 2008</u>.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-34</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-34</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>14 October 2005</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date <u>14 October 2005</u>.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____ .

DETAILED ACTION

Claim Objections

1.   Claim **10** is objected to because of the following informalities:

Regarding claim **10**, there is no antecedent basis for the limitation of "the signs".

The examiner respectfully recommends that the applicant delete "the signs" and

substitute it with --a sign--.

Claim Rejections - 35 USC § 101

2.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
> matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
> conditions and requirements of this title.

a) Claims **15 and 28** are rejected under 35 U.S.C. 101 for containing computer-related

nonstatutory subject matter.

Regarding claims **15 and 28**, the applicant claims a computer program product

for performing a method according to claims **1 and 24**, respectively. Data structures not

claimed as embodied in computer-readable media are descriptive material *per se* and

are not statutory because they are not capable of causing functional change in the

computer. See, e.g., *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a

data structure *per se* held nonstatutory). Such claimed data structures do not define

any structural and functional interrelationships between the data structure and other

claimed aspects of the invention which permit the data structure's functionality to be

realized. See MPEP 2106.01.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

a) Claims **1-34** are rejected under 35 U.S.C. 102(b) as being anticipated by Kaish et al.

(US 5,974,150).

Regarding claims **1, 15-17, and 31**, Kaish et al. discloses:

- receiving a first code, -determining if the object has a three-dimensional pattern

of distributed particles, -performing a two-dimensional data acquisition for acquisition

of a second code from the object, - determining the authenticity using the first and

second codes (See Fig 2-3, 4A and 4B; Col 22, lines 64-67; and Col 16, lines 21-25).

Regarding claims **2 and 18**, Kaish et al. discloses the determination if the object

has a three-dimensional pattern of distributed particles being performed by:

- acquiring a first image of the object with a first angle of illumination, - acquiring

a second image of the object with a second angle of illumination, - combining the first

and second images, - determining if a geometrical pattern is present in the combined

images (See Fig 2-3, 4A and 4B; Col 22, lines 64-67; and Col 16, lines 21-25 where an

illumination angle can be considered as either an angle of incidence from the different

light sources, the polarization angle of the incident light, or the angle of incidence on the

separate CCDs).

Regarding claims **3, 19 and 32**, Kaish et al. discloses wherein the determination if the object has a three-dimensional pattern of distributed particles is made by determining if the object is reflective (See Fig 2-3, 4A and 4B; Col 22, lines 64-67; and Col 16, lines 21-25 where it is understood that light from the sources can be reflected from either the top surface of the label, the surface of the dichroic fibers/microspheres, or from the bottom surface of the label).

Regarding claims **4 and 20**, Kaish et al. discloses wherein it is determined whether the objective is reflective by acquiring a first image of the object with diffused illumination and acquiring a second image of the object with direct illumination and comparing a brightness of the object in the first and second images (See Fig 1 and Col 16, lines 21-25 where a flashlamp is a known diffuse light source).

Regarding claims **5, 21 and 33**, Kaish et al. discloses wherein the determination if the object has a three-dimensional pattern of distributed particles being performed by:

illuminating the object with diffused, white light, detecting light reflected from the object and light transmitted through the object, determining if the reflected light and the transmitted light have complimentary colours (See Fig 1 and Col 16, lines 21-25 where a flashlamp is a known diffuse light source, that dichroic fibers/microspheres reflect light having different wavelengths depending on the polarization, and a CCD has RGB sensors to detect light of complimentary colors, i.e. red and green).

Regarding claims **6 and 22**, Kaish et al. discloses:

- acquiring an image of the object in a read position, - determining a dislocation of the read position with respect to a reference position by detecting of marker positions

in the image, performing a projective transformation of the image for compensation of the dislocation (Fig 1, item 4: *reference position* and Col 17, lines 50-51).

Regarding claims **7 and 23**, Kaish et al. discloses filtering of measurement data acquired by the two-dimensional data acquisition in order to provide the second code, wherein the filtering involves low pass filtering of the measurement data (Col 16, lines 25-26).

Regarding claims **8 and 34**, Kaish et al. discloses the first code comprising a set of random vectors and the second code being a data vector (See Col 14, lines 11-16 and Col 15, lines 1-4).

Regarding claims **9, 24-25 and 28-30**, Kaish et al. discloses the random vectors being pseudo random, each random vector being represented by a running index, and further comprising entering a seed value for a pseudo random number generator in order to generate the random vectors on the basis of the seed value (Col 16, lines 1-2).

Regarding claim **10**, Kaish et al. discloses determining the signs of scalar products of each one of the random vectors and the data vector for generating a third code (See Col 14, lines 11-16 and Col 15, lines 1-4 where it is understood that each vector is made up of scalar values that have an associated sign of either positive or negative).

Regarding claims **11-14**, Kaish et al. discloses the third code being a check code/symmetric key for comparison with an authentication code and the object belonging to a data carrier storing an encrypted file, the method further comprising

decrypting the file by means of the symmetric key, the first code being stored on the

data carrier (Col 26, lines 21-24 and Col 24, lines 63-65).

Regarding claims **26-27**, Kaish et al. discloses wherein the object is an image,

and further comprising scanning the image in order to obtain image data and filtering

the image data to provide the data vector; the filtering of the image data comprising a

calculation of mean values of sub-sets of the image data; the sub-sets of the image data

being determined by a predefined grid (Col 28, lines 14-43).

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Michael Andler whose telephone number is (571) 270-

5385. The examiner can normally be reached on Monday-Friday 7:30 AM to 3:30 PM

EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Michael Lee can be reached on (571) 272-2398. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

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system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael Andler/   /Michael G Lee/
Examiner, Art Unit 2876   Supervisory Patent Examiner, Art Unit 2876